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Sequence Listing was accepted.

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Reviewer: markspencer

Timestamp: Mon Jul 30 09:51:14 EDT 2007

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Application No: 10561014

Version No: 1.0

Input Set:

Output Set:

Started: 2007-07-26 10:04:14.371

Finished: 2007-07-26 10:04:16.802

Elapsed: 0 hr(s) 0 min(s) 2 sec(s) 431 ms

Total Warnings: 15

Total Errors: 0

No. of SeqIDs Defined: 38

Actual SeqID Count: 38

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (20)
W 213	Artificial or Unknown found in <213> in SEQ ID (21)
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W 213	Artificial or Unknown found in <213> in SEQ ID (23)
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SEQUENCE LISTING

<110> Pan, Shuchong
Simari, Robert D.

<120> Isoforms of Brain Natriuretic Peptide

<130> 07039-409US1

<140> 10561014

<141> 2007-07-26

<150> US 10/561,014

<151> 2005-12-16

<150> PCT/US2004/017554

<151> 2004-06-02

<150> US 60/480,460

<151> 2003-06-20

<160> 38

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<211> 33

<212> PRT

<213> Homo sapiens

<400> 1

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			20					25					30		
Leu															

<210> 2

<211> 14

<212> PRT

<213> Homo sapiens

<400> 2

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<210> 3

<211> 162

<212> PRT

<213> Homo sapiens

<400> 3

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1				5				10						15	

Leu His Leu Ala Phe Leu Gly Gly Arg Ser His Pro Leu Gly Ser Pro
 20 25 30
 Gly Ser Ala Ser Asp Leu Glu Thr Ser Gly Leu Gln Glu Gln Arg Asn
 35 40 45
 His Leu Gln Gly Lys Leu Ser Glu Leu Gln Val Glu Gln Thr Ser Leu
 50 55 60
 Glu Pro Leu Gln Glu Ser Pro Arg Pro Thr Gly Val Trp Lys Ser Arg
 65 70 75 80
 Glu Val Ala Thr Glu Gly Ile Arg Gly His Arg Lys Met Val Leu Tyr
 85 90 95
 Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ser Gly Cys
 100 105 110
 Phe Gly Arg Lys Met Asp Arg Ile Ser Ser Ser Ser Gly Leu Gly Cys
 115 120 125
 Lys Gly Lys His Pro Leu Pro Pro Arg Pro Pro Ser Pro Ile Pro Val
 130 135 140
 Cys Asp Thr Val Arg Val Thr Leu Gly Phe Val Val Ser Gly Asn His
 145 150 155 160
 Thr Leu

<210> 4
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 4
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 1 5 10 15
 Leu His Leu Ala Phe Leu Gly Gly Arg Ser His Pro Leu Gly Ser Pro
 20 25 30
 Gly Ser Ala Ser Asp Leu Glu Thr Ser Gly Leu Gln Glu Gln Arg Asn
 35 40 45
 His Leu Gln Gly Lys Leu Ser Glu Leu Gln Val Glu Gln Thr Ser Leu
 50 55 60
 Glu Pro Leu Gln Glu Ser Pro Arg Pro Thr Gly Val Trp Lys Ser Arg
 65 70 75 80
 Glu Val Ala Thr Glu Gly Ile Arg Gly His Arg Lys Met Val Leu Tyr
 85 90 95
 Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ser Gly Cys
 100 105 110
 Phe Gly Arg Lys Met Asp Arg Ile Ser Ser Ser Ser Gly Leu Gly Cys
 115 120 125
 Lys Val Val Gln Lys Glu Asn Gln Thr Phe Pro Pro Gly Phe Leu
 130 135 140

<210> 5
 <211> 489
 <212> DNA
 <213> Homo sapiens

<400> 5
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 ttctgtgggag gtcgttccca cccgctgggc agccccggtt cagcctcgga cttggaaacg 120
 tccgggttac aggagcagcg caaccatttg cagggcaaac tgctcgagct gcaggtggag 180
 cagacatccc tggagcccct ccaggagagc ccccgctcca caggtgtctg gaagtcccg 240
 gaggtagcca ccgagggcat ccgtgggcac cgaaaatgg tcctctacac cctgcgggca 300

ccacgaagcc ccaagatggg gcaaggggtct ggctgctttg ggaggaagat ggaccggatc	360
agctcctcca gtggcctggg ctgcaaaggt aagcaccccc tgccaccocg gccgccttcc	420
cccatccag tgtgtgacac tgtagagtc actttggggg ttgtgtgtctc tgggaaccac	480
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tccgggttac aggagcagcg caaccatttg cagggcaaac tgtcggagct gcaggtggag	180
cagacatccc tggagcccct ccaggagagc ccccgctcca caggtgtctg gaagtcccg	240
gaggtagcca ccgagggcat ccgtgggcac cgcaaatgg tcctctacac cctgcgggca	300
ccacgaagcc ccaagatggg gcaaggggtct ggctgctttg ggaggaagat ggaccggatc	360
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ggtttctct aa	432

<210> 7
 <211> 44
 <212> PRT
 <213> Pongo pygmaeus

<400> 7	
Gly Glu His Pro Leu Pro Pro Arg Leu Pro Ala Pro Ile Pro Val Cys	
1 5 10 15	
Asp Thr Val Arg Val Thr Leu Gly Phe Val Val Ser Gly Asn His Thr	
20 25 30	
Leu Arg Lys Cys His Leu Asp Ile Thr Ser Ser Cys	
35 40	

<210> 8
 <211> 58
 <212> PRT
 <213> Sus scrofa

<400> 8	
Gly Glu His Pro Pro Pro Phe Pro Leu His Ala Pro Val Ser Ile Thr	
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Ser Gly Phe Asp Val Ser Gly Asp Gln Thr Pro Arg Lys Gly His Leu	
20 25 30	
Asp Ile Thr Leu Ser Cys Cys Gln Ser Ser Arg Pro Arg Ser Ala Phe	
35 40 45	
Leu Glu Lys Leu Asn Leu Asp Ser Ile His	
50 55	

<210> 9
 <211> 33
 <212> PRT
 <213> Pan troglodytes

<400> 9	
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Asp Thr Val Arg Val Thr Leu Gly Phe Val Val Ser Gly Asn His Thr	

20

25

30

Leu

<210> 10

<211> 78

<212> PRT

<213> Ovis aries

<400> 10

Gly Glu Arg Leu Ser Ala Phe Pro Leu His Ile Thr Ile Arg Ala Thr
 1 5 10 15
 Ser Gly Ser Asp Val Ser Gly Asp Gln Ile Leu Asn Lys Glu His His
 20 25 30
 Ser Ser Leu Leu Ala Val Leu Arg Ala Lys Ala Cys Leu Ser Gly Asn
 35 40 45
 Ile Lys Phe Gly Gln His Ser Leu Ser Cys Leu Gly Ala Pro Ser Ile
 50 55 60
 His Leu Leu Pro Leu Thr Glu Arg Gly Arg Ile Phe Arg Met
 65 70 75

<210> 11

<211> 26

<212> PRT

<213> Mus musculus

<400> 11

Gly Glu His Leu Pro Cys His Phe Pro Ala Lys Leu His Thr His Pro
 1 5 10 15
 Ile Pro Val His Ala Thr Leu Arg Gly Pro
 20 25

<210> 12

<211> 33

<212> PRT

<213> Gorilla gorilla

<400> 12

Gly Glu His Pro Leu Pro Pro Arg Pro Pro Ser Pro Ile Pro Val Cys
 1 5 10 15
 Asp Thr Val Arg Val Thr Leu Gly Phe Val Val Ser Gly Asn His Thr
 20 25 30

Leu

<210> 13

<211> 86

<212> PRT

<213> Felis catus

<400> 13

Gly Lys Pro Pro Pro Cys Gln Leu Asp Pro Pro Ala Pro Leu Leu Trp
 1 5 10 15
 Val Pro Pro Ser Glu Pro Leu Leu Gly Leu Leu Ser Leu Gly Thr Asn
 20 25 30
 Ser Glu Lys Lys Thr Leu Gly Leu Tyr Ser Leu Leu Leu Thr Val Leu
 35 40 45

Lys Ala Lys Gly Arg Leu Ser Gly Asn Ile Lys Cys Gly His His Ser
50 55 60
Leu Leu Cys Pro Pro Arg Val Thr His Leu Leu Leu Pro Leu Trp Pro
65 70 75 80
Lys Gly Ala Glu Ser Pro
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<210> 14
<211> 169
<212> PRT
<213> *Canis familiaris*

<400> 14
Met Glu Pro Cys Ala Ala Leu Pro Arg Ala Leu Leu Leu Leu Leu Phe
1 5 10 15
Leu His Leu Ser Pro Leu Gly Gly Arg Pro His Pro Leu Gly Gly Arg
20 25 30
Ser Pro Thr Ser Glu Ala Ser Glu Ala Ser Glu Ala Ser Gly Leu Trp
35 40 45
Ala Val Gln Glu Leu Leu Gly Arg Leu Lys Asp Ala Val Ser Glu Leu
50 55 60
Gln Ala Glu Gln Leu Ala Leu Glu Pro Leu His Arg Ser His Ser Pro
65 70 75 80
Ala Glu Ala Pro Glu Ala Gly Glu Glu Arg Pro Val Gly Val Leu Ala
85 90 95
Pro His Asp Ser Val Leu Gln Ala Leu Arg Arg Leu Arg Ser Pro Lys
100 105 110
Met Met His Lys Ser Gly Cys Phe Gly Arg Arg Leu Asp Arg Ile Gly
115 120 125
Ser Leu Ser Gly Leu Gly Cys Asn Gly Lys Pro Pro Pro Cys His Leu
130 135 140
Gly Ser Pro Ser Pro Ala Pro Trp Val Arg Pro Leu Glu Pro Leu Leu
145 150 155 160
Gly Leu Leu Ser Arg Gly Ile Thr Leu
165

<210> 15
<211> 15
<212> PRT
<213> *Dendoaspis angusticeps*

<400> 15
Pro Ser Leu Arg Asp Pro Arg Pro Asn Ala Pro Ser Thr Ser Ala
1 5 10 15

<210> 16
<211> 32
<212> PRT
<213> *Homo sapiens*

<400> 16
Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp
1 5 10 15
Arg Ile Ser Ser Ser Ser Gly Leu Gly Cys Lys Val Leu Arg Arg His
20 25 30

<210> 17

<211> 41
<212> PRT
<213> *Dendroaspis angusticeps*

<400> 17
Glu Val Lys Tyr Asp Pro Cys Phe Gly His Lys Ile Asp Arg Ile Asn
1 5 10 15
His Val Ser Asn Leu Gly Cys Pro Ser Leu Arg Asp Pro Arg Pro Asn
20 25 30
Ala Pro Ser Thr Ser Ala Asp Asn Pro
35 40

<210> 18
<211> 28
<212> PRT
<213> *Homo sapiens*

<400> 18
Ser Leu Arg Arg Ser Ser Cys Phe Gly Gly Arg Met Asp Arg Ile Gly
1 5 10 15
Ala Gln Ser Gly Leu Gly Cys Asn Ser Phe Arg Tyr
20 25

<210> 19
<211> 22
<212> PRT
<213> *Homo sapiens*

<400> 19
Gly Leu Ser Lys Gly Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ser
1 5 10 15
Met Ser Gly Leu Gly Cys
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<210> 20
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
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<221> VARIANT
<222> 3
<223> Xaa = Pro, His, or Arg

<221> VARIANT
<222> 4
<223> Xaa = Pro or Leu

<221> VARIANT
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<223> Xaa = Pro, Leu, or Ser

<221> VARIANT
<222> 6
<223> Xaa = Cys or Pro

<221> VARIANT
<222> 7
<223> Xaa = Pro, His, Gln, or Arg

<221> VARIANT
<222> 8
<223> Xaa = Arg, Phe, or Leu

<221> VARIANT
<222> 9
<223> Xaa = Asp, Gly, or absent

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<223> Xaa = Ser, Pro, or Leu

<221> VARIANT
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<223> Xaa = Pro or absent

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<223> Xaa = Ser, Ala, or absent

<221> VARIANT
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<221> VARIANT
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<221> VARIANT
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<223> Xaa = Cys, His, or Val

<221> VARIANT
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<223> Xaa = Thr, Pro, or His

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<223> Xaa = Val, Ile, Pro, Val, Ser, or Leu

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<223> Xaa = Arg, Ser, Ile, or Glu

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<223> Xaa = Val, Ile, Ala, or Pro

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<223> Xaa = Thr, Val, or Leu

<221> VARIANT
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<223> Xaa = Leu, Ser, or His

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<221> VARIANT
<222> 26
<223> Xaa = Phe, Ser, Thr, or Leu

<221> VARIANT
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<223> Xaa = Val, Asp, or Leu

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<223> Xaa = Val, Leu, or Ser

<221> VARIANT
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<223> Xaa = Ser, Arg, or Leu

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<223> Xaa = Thr, Ile, or Ser

<221> VARIANT
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 20 25 30
 Xaa Xaa

<210> 21
 <211> 20
 <212> DNA
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<220>
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<400> 21
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<210> 22
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer

<400> 22
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<210> 23
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer

<400> 23
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<210> 24
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<220>
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<400> 24
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<210> 25
 <211> 20
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<220>
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<400> 25
agacatggat ccccagacag 20

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<211> 20
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<220>
<223> Primer

<400> 26
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<210> 27
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<220>
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<400> 27
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<210> 28
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<220>
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<400> 28
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<210> 29
<211> 20
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<213> Artificial Sequence

<220>
<223> Primer

<400> 29
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<210> 30
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<213> Artificial Sequence

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<223> Primer	
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ggacatcgct tcctctttgt t	21
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<212> DNA	
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<223> Primer	
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gaaggtattg tgggcatggt	20
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<213> Artificial Sequence	
<220>	
<223> Primer	
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tccacaggt ggtctggaag t	21
<210> 34	
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<212> PRT	
<213> Homo sapiens	
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Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp	
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Arg Ile Ser Ser Ser Ser Gly Leu Gly Cys Lys Val Val Gln Lys Glu
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 Asn Gln Thr Phe Pro Pro Gly Phe Leu
 35 40

<210> 36
 <211> 60
 <212> PRT
 <213> Homo sapiens

<400> 36
 Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp
 1 5 10 15
 Arg Ile Ser Ser Ser Ser Gly Leu Gly Cys Lys Gly Lys His Pro Leu
 20 25 30
 Pro Pro Arg Pro Pro Ser Pro Ile Pro Val Cys Asp Thr Val Arg Val
 35 40 45
 Thr Leu Gly Phe Val Val Ser Gly Asn His Thr Leu
 50 55 60

<210> 37
 <211> 32
 <212> PRT
 <213> Canis familiaris

<400> 37
 Gly Lys Pro Pro Pro Cys Arg Leu Gly Ser Pro Ser Pro Ala Pro Trp
 1 5 10 15
 Val Arg Pro Leu Glu Pro Leu Leu Gly Leu Leu Ser Arg Gly Ile Thr
 20 25 30

<210> 38
 <211> 510
 <212> DNA
 <213> Canis familiaris

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 gcctcgggaag cctcgggggt gtgggcccgtg caggagctgc tgggccgtct gaaggacgca 180
 gtttcagagc tgcaggcaga gcagttggcc ctggaacccc tgcaccggag ccacagcccc 240
 gcagaagccc cggaggcccg ggaggaacgc cccgtggggg tccttgcacc ccatgacagt 300
 gtcctccagg ccctgagaag actacgcagc cccaagatga tgcacaagtc aggggtgcttt 360
 ggccggaggc tggaccggat cggtccctc agtggcctgg gctgcaatgg taagccgcct 420
 ccctgccacc ttggtcctcc ctcccagcc cctgggttc gacccttggga accccttctg 480
 ggtttgttgt ctgggggat cacactctga 510

